

INTERNATIONAL SEARCH REPORT

International Application No
PCT/CH 03/00751

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H05K7/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H05K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 856 909 A (KAMO HIROAKI ET AL) 5 January 1999 (1999-01-05)	1,2,8-11
A	the whole document	3
A	EP 0 900 621 A (LORCH SCHWEISSTECHNIK GMBH) 10 March 1999 (1999-03-10)	1
A	the whole document	
A	US 2002/026996 A1 (FUNG HUI S ET AL) 7 March 2002 (2002-03-07)	1
A	the whole document	
A	EP 0 914 030 A (LUCENT TECHNOLOGIES INC) 6 May 1999 (1999-05-06)	1
A	the whole document	
A	US 4 699 208 A (BLOESL KARL ET AL) 13 October 1987 (1987-10-13)	1
A	the whole document	

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

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Date of the actual completion of the international search

30 July 2004

Date of mailing of the international search report

06/08/2004

Name and mailing address of the ISA

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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 5856909	A	05-01-1999	JP	3147222 B2		19-03-2001
			JP	9289719 A		04-11-1997
			CA	2202447 A1		19-10-1997
			DE	19716401 A1		20-11-1997
			GB	2312271 A ,B		22-10-1997
EP 0900621	A	10-03-1999	DE	19739309 A1		18-03-1999
			EP	0900621 A2		10-03-1999
US 2002026996	A1	07-03-2002	NONE			
EP 0914030	A	06-05-1999	EP	0914030 A1		06-05-1999
			AU	708175 B1		29-07-1999
			BR	'9804045 A		21-12-1999
			CA	2248518 A1		28-04-1999
			CN	1220574 A ,B		23-06-1999
			ID	21139 A		29-04-1999
			JP	11195888 A		21-07-1999
US 4699208	A	13-10-1987	DE	3517149 A1		13-11-1986
			CH	668881 A5		31-01-1989
			IT	1188424 B		14-01-1988
			JP	62011255 A		20-01-1987